

# OTAY VALLEY REGIONAL PARK TRAIL GUIDELINES

OCTOBER 16, 2003





# TRAIL DEVELOPMENT GUIDELINE MATRIX

GUIDELINES	TYPE A	TYPE B	TYPE C	TYPE D
<b>Tread Width (1)</b>	6' - 8' (2)	4' - 6'	2' or 4'	8'
<b>Function</b>	Recreation, Maintenance, Emergency	Recreation, Maintenance, Emergency	Remote Recreation	Limited Recreation, Maintenance, Transportation
<b>Grade (3)</b>	5%	7.50%	15%	See Text
<b>Cross Slope (4-6)</b>	2%	2%	1 - 8%	2%
<b>Surface Material (7)</b>	D.G. or Native Soil	D.G. or Native Soil	D.G. or Native Soil	D.G.
<b>Anticipated User Volume</b>	High	Medium	Med - Low	High
<b>Horizontal Clearance (8-9)</b>	2' Beyond Tread Edge	2' Beyond Tread Edge	1' Beyond Tread Edge	2' Beyond Tread Edge
<b>Vertical Clearance</b>	12'	12'	12'	12'

## Notes:

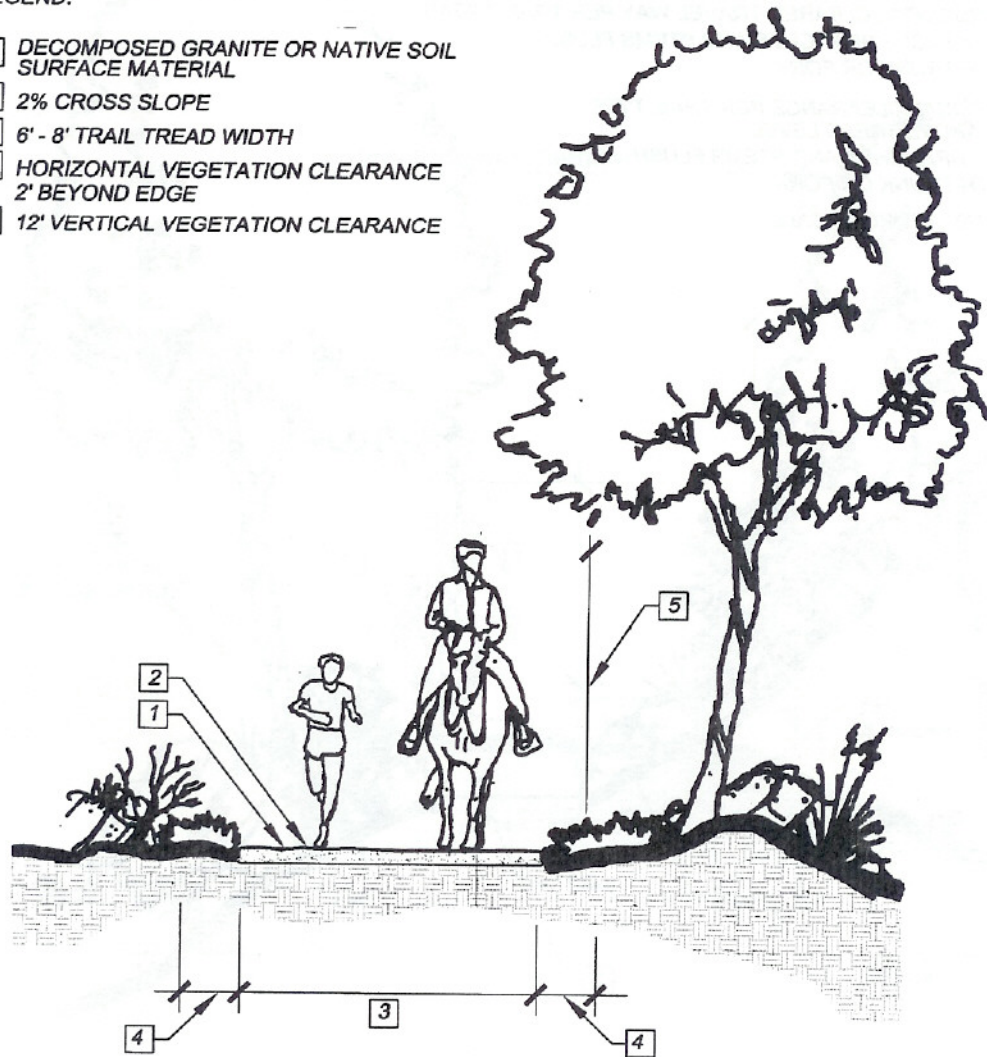
- Where multi-use trail tread is less than 6 feet occasional passing areas or turnouts shall be added at gentle slopes or as approved by the OVRP Operations Management. Tread width of specialized trails will be influenced by site-specific conditions on a case-by-case basis, and they may vary from the suggested guidelines.
- Trails located within utility easements may be improved to a maximum tread width of 12'.
- The optimum grade ranges described in the Trail Design Guideline Matrix are advisory. Grades of 15% or less are preferred but may not be feasible in some locations. Where grades exceed 10%, long, gradual switchbacks will be used. Rest areas or landings will be provided when grades exceed 5%. The OVRP Operations Management may consider varying these limits in order to provide a different level of user experience.
- In level areas, the trail surface shall be crowned. On slopes, trails shall be graded with cross slopes.
- Standard out-slopes range from 1% to 10%, depending on trail classification.
- For all crowned trails, the slopes from the centerline to each edge should be 1% to 5%.
- Binding agents may be required for a particular trail situation from the perspective of responsible management.
- "Clearance" refers to vegetation removal - see legend call outs on trail profiles in the design guidelines for details.
- Horizontal clearance width varies by trail type but should generally be a minimum of 2 feet between the outer edge of a trail and any physical obstructions. Vertical clearance from overhanging branches or fixed structures depends on Trail Type and anticipated users. Trails for equestrians and/or bicyclists should maintain a minimum vertical clearance of 12 feet, while trails for hikers only can have less.

Table 1 - Trail Development Guideline Matrix

# TRAIL TYPE "A "

## LEGEND:

- 1 DECOMPOSED GRANITE OR NATIVE SOIL SURFACE MATERIAL
- 2 2% CROSS SLOPE
- 3 6' - 8' TRAIL TREAD WIDTH
- 4 HORIZONTAL VEGETATION CLEARANCE 2' BEYOND EDGE
- 5 12' VERTICAL VEGETATION CLEARANCE



## Notes:

- 1. Refer to the design guidelines Trail Matrix for optimums.
- 2. Refer to the Trail Structure Terminology Detail for proper cross slope direction.

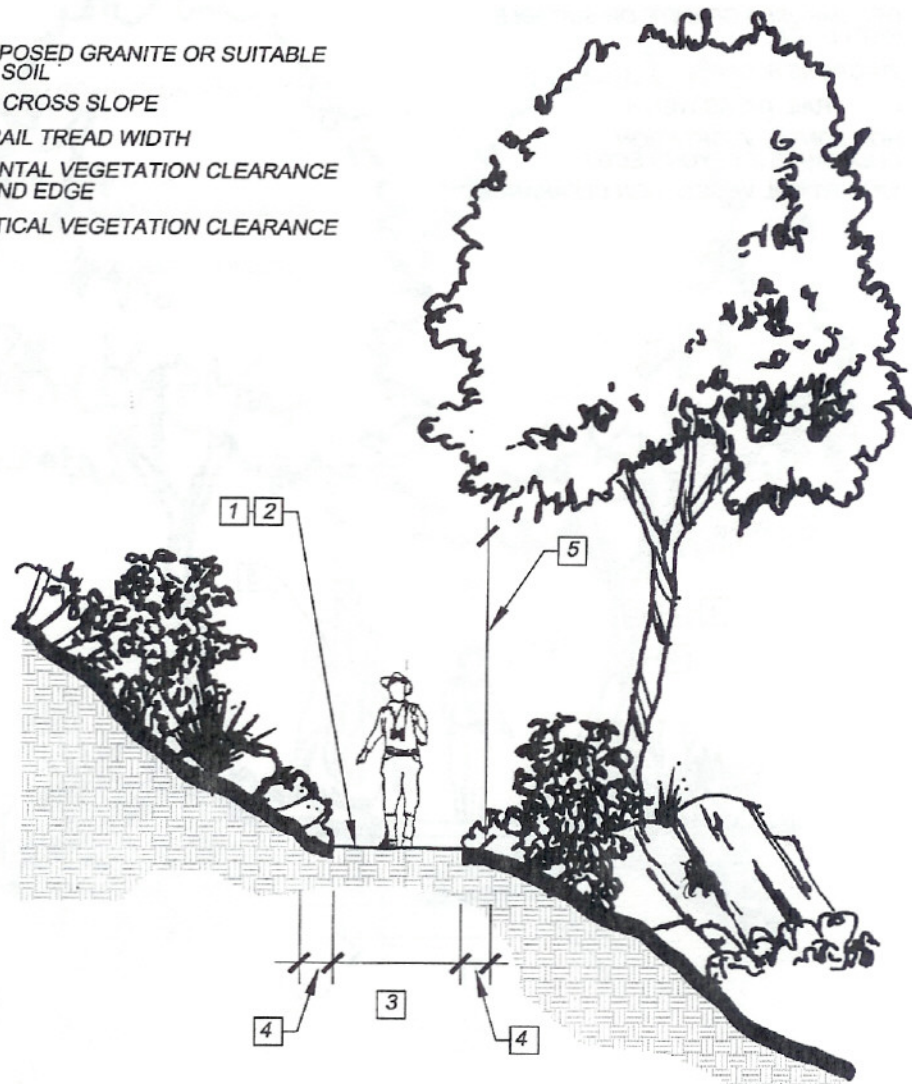
NOT TO SCALE

Figure 7: Type A Trail Profile

# TRAIL TYPE " C "

## LEGEND:

- 1 DECOMPOSED GRANITE OR SUITABLE NATIVE SOIL
- 2 1% - 8% CROSS SLOPE
- 3 2' - 4' TRAIL TREAD WIDTH
- 4 HORIZONTAL VEGETATION CLEARANCE 1' BEYOND EDGE
- 5 12' VERTICAL VEGETATION CLEARANCE



## Notes:

1. Refer to the design guidelines Trail Matrix for optimums.
2. Refer to the Trail Structure Terminology Detail for proper cross slope direction.

NOT TO SCALE

Figure 9: Type C Trail Profile